

## PATENT ASSIGNMENT COVER SHEET

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<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT
<b>CONVEYING PARTY DATA</b>	
<b>Name</b>	<b>Execution Date</b>
JIAYU PENG	07/29/2022
SHENG NA MA	08/06/2022
XICHEN HUANG	07/31/2022
JAMES ROBERT KOEHLER	07/29/2022
LU ZHANG	08/10/2022
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<b>Postal Code:</b>	94043
<b>PROPERTY NUMBERS Total: 1</b>	
<b>Property Type</b>	<b>Number</b>
<b>Application Number:</b>	17911881
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<b>ATTORNEY DOCKET NUMBER:</b>	GGLD-654-PCT-US
<b>NAME OF SUBMITTER:</b>	LILLIAN G. FANT
<b>SIGNATURE:</b>	/Lillian G. Fant/
<b>DATE SIGNED:</b>	09/29/2022
<b>Total Attachments: 3</b>	
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**PATENT**

**REEL: 061257 FRAME: 0386**

**CONFIRMATORY ASSIGNMENT OF WORLDWIDE RIGHTS**

**WHEREAS**, we, Jiayu Peng, a citizen of China, residing in Sunnyvale, California; Sheng Na Ma, a citizen of the United States of America, residing in Belmont, California; Xichen Huang, a citizen of China, residing in Sunnyvale, California; James Robert Koehler, a citizen of the United States of America, residing in Boulder, Colorado; and Lu Zhang, a citizen of the United States of America, residing in Beijing, China, as assignors, have made an invention entitled

**“DIFFERENTIALLY PRIVATE FREQUENCY DEDUPLICATION”**

(the “Invention”) as described in a patent application (the “Patent Application”), the specification of which:

- ☐ is attached hereto.
- ☐ was filed on \_\_\_\_\_ as U.S. Application Serial No. \_\_\_\_\_.
- ☒ was filed on June 23, 2021 as PCT Application Serial No. PCT/US2021/038716.
- ☐ was filed on \_\_\_\_\_ as \_\_\_\_\_.

**WHEREAS**, Google LLC, 1600 Amphitheatre Parkway, Mountain View, California 94043, as assignee, has received and secured or hereby receives and secures the entire right, title and interest in and to the Invention and the Patent Application in all countries throughout the world, in and to any Letters Patent or similar rights for the Invention to be issued upon the Patent Application throughout the world, any application for Letters Patent or similar rights for the Invention claiming priority to the Patent Application in all countries throughout the world, and any Letters Patent or similar rights to be issued claiming priority to the Patent Application in all countries throughout the world;

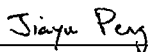
**NOW, THEREFORE**, be it known that for good and valuable consideration from assignee, the receipt of which is hereby acknowledged, we, as assignors, acknowledge and confirm that we have sold, assigned, transferred, conveyed, and set over, or do hereby sell, assign, transfer, convey, and set over unto the assignee, its lawful successors and assigns, our entire right, title, and interest in and to the Invention and the Patent Application now existing and in the future, and all divisions, continuations, continuations-in-part, and national-stage applications thereof, any and all applications claiming priority to any of the foregoing, all Letters Patent or similar rights which may be granted on any of the foregoing, all reissues and re-examinations of any of the foregoing, all permutations of claims to any subject matter included in the Patent Application, including any claims appearing in any of the foregoing, all rights to claim priority on the basis of any of the foregoing applications, all applications

for Letters Patent or similar rights which may hereafter be filed for the Invention in any country, all Letters Patent or similar rights which may be granted on the Invention in any country, all extensions, renewals, reissues, and re-examinations of any of the foregoing, any and all causes of action, claims, and demands and other rights for, or arising from, any infringement, breaches, or misappropriation, including past infringements, breaches, and misappropriations of any of the foregoing throughout the world, the right to take actions to assert any and all causes of action related to any of the foregoing throughout the world, including those accrued in assignors' favor for infringement, breach, and misappropriation, and the right to sue and recover and have past, present, and future damages and profits for infringement, breach, and misappropriation, in all countries, territories, and possessions throughout the world in accordance with the laws thereof, to the full extent of such rights, and we hereby authorize and request the Commissioner for Patents of the United States and any official of any other country whose duty it is to issue patents on applications as described above, to issue all Letters Patent or similar rights for the Invention or the Patent Application or any applications as described above to assignee, its successors and assigns, in accordance with the terms of this Assignment, and we hereby authorize the assignee, its successors and assigns, and the attorney(s) of record in applications as described above to modify this Assignment, subsequent to its execution, to more specifically identify the applications as described above.

**WE HEREBY** covenant that we have the full right to convey the interest assigned by this Assignment, and we have not executed, and will not execute any agreement in conflict with this Assignment;

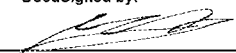
**AND, WE HEREBY** further covenant and agree that we will, without further consideration, communicate with assignee, its successors and assigns, any facts known to us respecting the Invention, sign all lawful papers when called upon to do so, execute and deliver any and all papers that may be necessary or desirable to perfect the title of the Invention in said assignee, its successors and assigns, execute all divisional, continuation, reissue applications, re-examination applications, and any applications claiming priority to the Patent Application, and make all rightful oaths and generally aid assignee, its successors and assigns, to obtain and enforce proper patent and any other protection for the Invention in the United States and any other country, it being understood that any expense incident to the execution of such papers shall be borne by the assignee, its successors and assigns.

IN WITNESS WHEREOF, the Assignors have executed this document on the date indicated below:

DocuSigned by:  
  
A17EC5C9E2E34A7... Jiayu Peng


7/29/2022

Date

DocuSigned by:  
  
6E68DD058683484... Sheng Na Ma

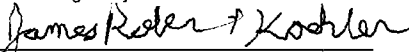
8/6/2022

Date

DocuSigned by:  
  
D18C28990BF7444... Xichen Huang

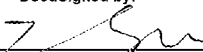
7/31/2022

Date

DocuSigned by:  
  
2C6FC6323445F... James Robert Koehler

7/29/2022

Date

DocuSigned by:  
  
2E4B277D023445F... Lu Zhang

8/10/2022

Date